Summary of 8-Step Floodplain Analysis

Application ID: NCR39808

Owner: Borough of Brigantine

Address: Beach Crossings between 10th Street South and Vernon Place

Activities: Beach crossing rehabilitation and storm drainage improvement

Step 1: Determine if the proposed action is in a 100-year floodplain.

This action is located in a 100-year floodplain. The majority of the proposed project site is located within Special Flood Hazard Area Zone V (area of special flood hazard with water surface elevations determined) as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 2 of 3 Number 3452860002D, revised July 15, 1992, while a small portion of the proposed project site is located within Special Flood Hazard Area Zone A, as indicated on the FEMA Post-Sandy Preliminary Work Map. Both maps are attachments to this document (see NCR39808_FirmPanel No345286002D_07-15-92_NCR_TO1058 and NCR39808_FloodplainManagementand FloodInsuranceMap_NCR_TO1058). Areas designated as a Special Flood Hazard Area are those subject to inundation by the 1 percent annual chance flood (e.g., a 100-year flood), also known as the base flood.

Step 2: Notify the public of the intent to locate the proposed action in a floodplain.

An early public notice of proposed activity within the 100-year floodplain was published by NJDEP on November 10, 2014 in English and November 11, 2014 in Spanish (see NCR39808_ FloodplainEarlyNotice_English_NCR_TO1058 and NCR39808_FloodplainEarlyNotice_Spanish_ NCR_TO1058, respectively and NCR39808_FloodplainEarlyNoticeAffidavit

ThePressofAtlanticCity_NCR_TO1058 and NCR39808_FloodplainEarlyNoticeAffidavit_ElDiario_ NCR_TO1058). The notice requested comments from the public concerning floodplain and natural resource impacts of the proposed economic revitalization and storm mitigation. The notice also indicated that the NJDEP would evaluate proposed actions under the program for potential direct and indirect impacts associated with floodplain development and, where practicable, would design or modify proposed actions to minimize potential adverse impacts to lives, property, and natural values within the floodplain. The notice was published in the Press of Atlantic City and El Diario and posted at http://www.state.nj.us/dca/divisions/sandyrecovery/review/. The required 15-day period was conducted to allow for public comments, and comments were accepted either electronically or via written correspondence. No comments were received from the early notice concerning the proposed action (see NCR39808_Floodplain EarlyNotice_Comments_NCR_TO1058).

Step 3: Identify and evaluate practicable alternatives to locating the proposed action in a floodplain.

Two alternatives to the proposed action within the 100-year floodplain were considered:

Alternative 1: Relocate the Proposed Action Outside of the 100-year floodplain

The nature of the project, the replacement of existing beach crossings, could not be performed outside of the floodplain.

Alternative 2: No Action or Alternative Actions that Serve the Same Purpose

A no action alternative was considered and rejected because in action on this item would result in ongoing flooding issues during large storm events. Alternative methods of construction in this area has an increased potential to damage the surrounding environmental habitat along the dunes, and was therefore rejected as well.

Step 4: Identify and describe the proposed action's direct and indirect effects associated with occupying or modifying the floodplain.

While the proposed construction would occur within the 100-year floodplain, the proposed action represents no substantive change from the pre-Superstorm Sandy condition of the floodplain. Drainage improvements and storm mitigation measures would reduce or eliminate flooding.

The project consists of the replacement and enhancement of existing crossovers along a 10-block section between 10th Street South (at the south end) and Vernon Place (at the north end). Existing 3-to 4-foot wide timber crossovers, where present, will be removed and replaced with dense graded aggregate (DGA) paths 10 feet wide, flanked by post-and-rail fences that are intended to protect adjoining dune areas from foot traffic. Paths will include offsets to reduce their tendency to serve as channels for storm surges. Mobility mats will be purchased and installed seasonally from the ends of the paths toward the surf for rollout access for pedestrians, wheelchair users, strollers, and other light vehicles. Additionally, 340 linear feet of 24-inch perforated pipe will be installed in 4th Street South and inlets to improve local stormwater drainage. This project element will be located in 4th Street South crossover path. All project areas are located within the Flood Hazard Area Zone V10, as shown on the FEMA FIRM number 3452860002D dated July 15, 1992. Review of the FEMA Post-Sandy Preliminary Work Map indicates that the majority of the proposed project site is located within Special Flood Hazard Area Zone V, while a small portion of the proposed project site, specifically the 4th Street South storm drainage improvements area, is located within Special Flood Hazard Area Zone A.

Step 5: Identify methods to minimize the potential adverse impacts within a floodplain and to restore and preserve its natural and beneficial values.

As noted in Step 4, the proposed project would have no adverse effects on the floodplain and would not degrade its natural and beneficial values.

Step 6: Reevaluate the proposed action to determine if it is still practicable given its floodplain effects.

The proposed action is viewed as practicable because it avoids significant adverse impacts to the floodplain in the local vicinity while helping to meet the community's need for improved flood control and decreased erosion impacts. The project, as proposed, would minimize potential hazards to human safety, health, and welfare.

The no action alternative also remains impracticable because it will not satisfy the need for post-Hurricane Sandy economic revitalization within this substantially impacted community.

Step 7: If the only practicable alternative is locating in a floodplain, publish a final public notice.

It has been determined that there is no practicable alternative to locating the project in the floodplain. This is due to: 1) the need for storm mitigation within the proposed area, 2) the need to reduce straight line flow within the area; 3) the lack of alternative locations outside of the 100-year floodplain related to the physical geography of this coastal community; and 4) the limited scope and impact of the proposed project related to impacts on human health, public property, and floodplain values.

A final public notice will be published in accordance with 24 CFR Part 55 for a minimum 7-day comment period. The final notice will detail the reasons why the project must be located in the floodplain, a list of alternatives considered, and all mitigation measures taken to minimize adverse impacts and preserve natural and beneficial floodplain values.

All comments received during the comment period will be responded to and fully addressed prior to funds being committed to the proposed project, in compliance with Executive Order 11988 or 24 CFR Part 55.

Step 8: The proposed action can be implemented after steps 1 through 7 have been completed.

Implementation of the proposed action may require additional local and state permits, which could place additional design modifications or mitigation requirements on the project.